

Abstract

Radio telephone structure where different functions share mechanical parts. The structure employs at least one piezoelectric ceramic element (350, 360) to produce mechanical movement in a component that would be needed in the radio telephone anyway. The mechanical movement generates sound waves or vibration. The moving element may be a plane or part of a plane (311, 312) of a planar antenna. The structure can be applied inverted, in which case the earphone assembly, for example, serves as a microphone. The number of components and/or elements needed in a radio telephone is reduced and the overall space required by the antenna and speaker is reduced.